

*D<sup>2</sup> C<sup>2</sup> cont*

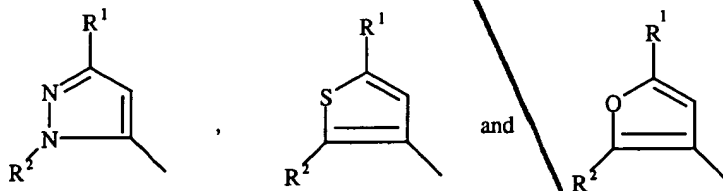
The moiety Ar is a 5-10 member, preferably a 5- or 6- member aromatic structure containing 0-2 members of the group consisting of nitrogen, oxygen and sulfur which is unsubstituted or substituted by halogen up to per-halosubstitution and optionally substituted by Z<sub>n1</sub>, wherein n1 is 0 to 3.

**IN THE CLAIMS:**

- and D<sup>4</sup>*
1. (Amended) A compound of formula I or a pharmaceutically acceptable salt thereof



wherein A is a heteroaryl selected from the group consisting of



B is an up to tricyclic, aryl or heteroaryl moiety of up to 30 carbon atoms with at least one 5- or 6-member aromatic structure containing 0-4 members of the group consisting of nitrogen, oxygen and sulfur, substituted by -Y-Ar and optionally substituted by one or more substituents independently selected from the group consisting of halogen, up to per-halosubstitution, and X<sub>n</sub>,

wherein n is 0-2 and each X is independently selected from the group consisting of -CN, -CO<sub>2</sub>R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>5</sup>, -C(O)R<sup>5</sup>, -NO<sub>2</sub>, -OR<sup>5</sup>, -SR<sup>5</sup>, -NR<sup>5</sup>R<sup>5</sup>, -NR<sup>5</sup>C(O)OR<sup>5</sup>, -NR<sup>5</sup>C(O)R<sup>5</sup>, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>1</sub>-C<sub>10</sub> alkoxy, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>6</sub>-C<sub>14</sub> aryl, C<sub>7</sub>-C<sub>24</sub> alkaryl, C<sub>3</sub>-C<sub>13</sub> heteroaryl, C<sub>4</sub>-C<sub>23</sub> alkheteroaryl, substituted C<sub>1</sub>-C<sub>10</sub> alkyl, substituted C<sub>2</sub>-C<sub>10</sub> alkenyl, substituted C<sub>1</sub>-C<sub>10</sub> alkoxy, substituted C<sub>3</sub>-C<sub>10</sub> cycloalkyl; and substituted C<sub>4</sub>-C<sub>23</sub> alkheteroaryl -Ar;

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where X is a substituted group, it is substituted by one or more substituents independently selected from the group consisting of  $-\text{CN}$ ,  $-\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{R}^5$ ,  $-\text{C}(\text{O})\text{NR}^5\text{R}^5$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NR}^5\text{R}^5$ ,  $-\text{NO}_2$ ,  $-\text{NR}^5\text{C}(\text{O})\text{R}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$  and halogen up to per-halosubstitution;

wherein  $\text{R}^5$  and  $\text{R}^5$  are independently selected from H,  $\text{C}_1\text{-C}_{10}$  alkyl,  $\text{C}_2\text{-C}_{10}$  alkenyl,  $\text{C}_3\text{-C}_{10}$  cycloalkyl,  $\text{C}_6\text{-C}_{14}$  aryl,  $\text{C}_3\text{-C}_{13}$  heteroaryl,  $\text{C}_7\text{-C}_{24}$  alkaryl,  $\text{C}_4\text{-C}_{23}$  alkheteroaryl, up to per-halosubstituted  $\text{C}_1\text{-C}_{10}$  alkyl, up to perhalosubstituted  $\text{C}_2\text{-C}_{10}$  alkenyl, up to per-halosubstituted  $\text{C}_3\text{-C}_{10}$  cycloalkyl, up to per-halosubstituted  $\text{C}_6\text{-C}_{14}$  aryl and up to per-halosubstituted  $\text{C}_3\text{-C}_{13}$  heteroaryl,

C<sup>3</sup>

wherein Y is  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{N}(\text{R}^5)-$ ,  $-(\text{CH}_2)_m-$ ,  $-\text{C}(\text{O})-$ ,  $-\text{CH}(\text{OH})-$ ,  $-(\text{CH}_2)_m\text{O}-$ ,  $-\text{NR}^5\text{C}(\text{O})\text{NR}^5\text{R}^5-$ ,  $-\text{NR}^5\text{C}(\text{O})-$ ,  $-\text{C}(\text{O})\text{NR}^5$ ,  $-\text{O}(\text{CH}_2)_m-$ ,  $-(\text{CH}_2)_m\text{S}-$ ,  $-(\text{CH}_2)_m\text{N}(\text{R}^5)-$ ,  $-\text{O}(\text{CH}_2)_m-$ ,  $-\text{CHX}^a-$ ,  $-\text{CX}^a_2-$ ,  $-\text{S}-(\text{CH}_2)_m-$  and  $-\text{N}(\text{R}^5)(\text{CH}_2)_m-$ ,

$m = 1-3$ , and  $\text{X}^a$  is halogen; and

Ar is a 5-10 member aromatic structure containing 0-2 members of the group consisting of nitrogen, oxygen and sulfur which is unsubstituted or substituted by halogen up to per-halosubstitution and optionally substituted by  $\text{Z}_{n1}$ , wherein  $n1$  is 0 to 3 and each Z is independently selected from the group consisting of  $-\text{CN}$ ,  $-\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{NR}^5\text{R}^5$ ,  $-\text{C}(\text{O})\text{NR}^5$ ,  $-\text{NO}_2$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NR}^5\text{R}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$ ,  $-\text{C}(\text{O})\text{R}^5$ ,  $\text{NR}^5\text{C}(\text{O})\text{R}^5$ ,  $\text{C}_1\text{-C}_{10}$  alkyl,  $\text{C}_3\text{-C}_{10}$  cycloalkyl,  $\text{C}_6\text{-C}_{14}$  aryl,  $\text{C}_3\text{-C}_{13}$  heteroaryl,  $\text{C}_7\text{-C}_{24}$  alkaryl,  $\text{C}_4\text{-C}_{23}$  alkheteroaryl, substituted  $\text{C}_1\text{-C}_{10}$  alkyl, substituted  $\text{C}_3\text{-C}_{10}$  cycloalkyl, substituted  $\text{C}_7\text{-C}_{24}$  alkaryl and substituted  $\text{C}_4\text{-C}_{23}$  alkheteroaryl;

wherein if Z is a substituted group, it is substituted by the one or more substituents independently selected from the group consisting of  $-\text{CN}$ ,  $-\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{NR}^5\text{R}^5$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NO}_2$ ,  $-\text{NR}^5\text{R}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{R}^5$  and  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$ , and

wherein  $\text{R}^2$  is  $\text{C}_6\text{-C}_{14}$  aryl,  $\text{C}_3\text{-C}_{14}$  heteroaryl, substituted  $\text{C}_6\text{-C}_{14}$  aryl or substituted  $\text{C}_3\text{-C}_{14}$  heteroaryl,

wherein if  $\text{R}^2$  is a substituted group, it is substituted by one or more substituents independently selected from the group consisting of halogen, up to per-halosubstitution, and  $\text{V}_n$ ,

wherein  $n = 0-3$  and each V is independently selected from the group consisting of  $-\text{CN}$ , -

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$\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{NR}^5\text{R}^5$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NR}^5\text{R}^5$ ,  $-\text{C}(\text{O})\text{R}^5$ ,  $-\text{OC}(\text{O})\text{NR}^5\text{R}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$ ,  $-\text{SO}_2\text{R}^5$ ,  $-\text{SOR}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{R}^5$ ,  $-\text{NO}_2$ ,  $\text{C}_1$ - $\text{C}_{10}$  alkyl,  $\text{C}_3$ - $\text{C}_{10}$  cycloalkyl,  $\text{C}_6$ - $\text{C}_{14}$  aryl,  $\text{C}_3$ - $\text{C}_{13}$  heteroaryl,  $\text{C}_7$ - $\text{C}_{24}$  alkaryl,  $\text{C}_4$ - $\text{C}_{24}$  alkheteroaryl, substituted  $\text{C}_1$ - $\text{C}_{10}$  alkyl, substituted  $\text{C}_3$ - $\text{C}_{10}$  cycloalkyl, substituted  $\text{C}_6$ - $\text{C}_{14}$  aryl, substituted  $\text{C}_3$ - $\text{C}_{13}$  heteroaryl, substituted  $\text{C}_7$ - $\text{C}_{24}$  alkaryl and substituted  $\text{C}_4$ - $\text{C}_{24}$  alkheteroaryl,

where if V is a substituted group, it is substituted by one or more substituents independently selected from the group consisting of halogen, up to per-halosubstitution,  $-\text{CN}$ ,  $-\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{R}^5$ ,  $-\text{C}(\text{O})\text{NR}^5\text{R}^5$ ,  $-\text{NR}^5\text{R}^5$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{R}^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$  and  $-\text{NO}_2$ ;

wherein  $\text{R}^5$  and  $\text{R}^5$  are each independently as defined above.

4. (Amended) A compound of claim 1, wherein

Y is selected from the group consisting of  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{CH}_2-$ ,  $-\text{SCH}_2-$ ,  $-\text{CH}_2\text{S}-$ ,  $-\text{CH}(\text{OH})-$ ,  $-\text{C}(\text{O})-$ ,  $-\text{CX}^a_2$ ,  $-\text{CX}^a\text{H}-$ ,  $-\text{CH}_2\text{O}-$  and  $-\text{OCH}_2-$ , and  $\text{X}^a$  is halogen.

C4

5. (Amended) A compound of claim 4, wherein

Ar is selected from the group consisting of phenyl, pyridinyl, naphthyl, pyrimidinyl, quinoline, isoquinoline, imidazole and benzothiazolyl, unsubstituted or substituted by halogen, up to per-halo substitution, and

Z and X are independently selected from the group consisting of  $-\text{R}^6$ ,  $-\text{OR}^6$  and  $-\text{NHR}^7$ , wherein  $\text{R}^6$  is hydrogen,  $\text{C}_1$ - $\text{C}_{10}$ -alkyl or  $\text{C}_3$ - $\text{C}_{10}$ -cycloalkyl and  $\text{R}^7$  is selected from the group consisting of hydrogen,  $\text{C}_3$ - $\text{C}_{10}$ -alkyl,  $\text{C}_3$ - $\text{C}_6$ -cycloalkyl and  $\text{C}_6$ - $\text{C}_{10}$ -aryl, wherein  $\text{R}^6$  and  $\text{R}^7$  can be substituted by halogen or up to per-halosubstitution.

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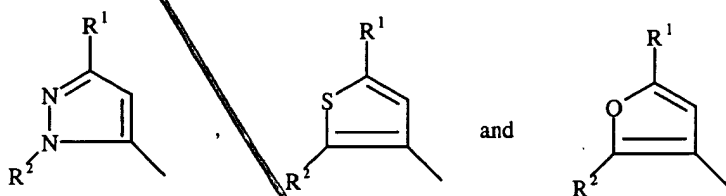
7. (Amended) A compound of claim 4, wherein Ar is phenyl or pyridinyl, Y is  $-\text{O}-$ ,

$-\text{S}-$  or  $-\text{CH}_2-$ , and X and Z are independently Cl, F,  $\text{NO}_2$  or  $\text{CF}_3$ .

15. (Amended) A method for the treatment of disease mediated by raf kinase, comprising administering an effective amount of a compound of formula I or a pharmaceutically acceptable salt thereof to a host in need thereof:



wherein A is a heteroaryl selected from the group consisting of



wherein  $R^1$  is selected from the group consisting of  $C_3$ - $C_{10}$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl, up to per-halosubstituted  $C_1$ - $C_{10}$  alkyl and up to per-halosubstituted  $C_3$ - $C_{10}$  cycloalkyl;

B is a substituted or unsubstituted, up to tricyclic, aryl or heteroaryl moiety of up to 30 carbon atoms with at least one 5- or 6-member aromatic structure containing 0-4 members of the group consisting of nitrogen, oxygen and sulfur, wherein if B is a substituted group, it is substituted by one or more substituents independently selected from the group consisting of halogen, up to per-halosubstitution, and  $X_n$ ,

wherein n is 0-3 and each X is independently selected from the group consisting of  $-\text{CN}$ ,  $\text{CO}_2R^5$ ,  $-\text{C}(\text{O})\text{NR}^5R^5$ ,  $-\text{C}(\text{O})R^5$ ,  $-\text{NO}_2$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NR}^5R^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$ ,  $-\text{NR}^5\text{C}(\text{O})R^5$ ,  $C_1$ - $C_{10}$  alkyl,  $C_{2-10}$ -alkenyl,  $C_{1-10}$ -alkoxy,  $C_3$ - $C_{10}$  cycloalkyl,  $C_6$ - $C_{14}$  aryl,  $C_7$ - $C_{24}$  alkaryl,  $C_3$ - $C_{13}$  heteroaryl,  $C_4$ - $C_{23}$  alkheteroaryl, substituted  $C_1$ - $C_{10}$  alkyl, substituted  $C_{2-10}$ -alkenyl, substituted  $C_{1-10}$ -alkoxy, substituted  $C_3$ - $C_{10}$  cycloalkyl, substituted  $C_4$ - $C_{23}$  alkheteroaryl and  $-\text{Y}-\text{Ar}$ ;

where X is a substituted group, it is substituted by one or more substituents independently selected from the group consisting of  $-\text{CN}$ ,  $-\text{CO}_2R^5$ ,  $-\text{C}(\text{O})R^5$ ,  $-\text{C}(\text{O})\text{NR}^5R^5$ ,  $-\text{OR}^5$ ,  $-\text{SR}^5$ ,  $-\text{NR}^5R^5$ ,  $-\text{NO}_2$ ,  $-\text{NR}^5\text{C}(\text{O})R^5$ ,  $-\text{NR}^5\text{C}(\text{O})\text{OR}^5$  and halogen up to per-halosubstitution;

wherein  $R^5$  and  $R^5$  are independently selected from H,  $C_1$ - $C_{10}$  alkyl,  $C_{2-10}$ -alkenyl,  $C_3$ - $C_{10}$

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cycloalkyl, C<sub>6</sub>-C<sub>14</sub> aryl, C<sub>3</sub>-C<sub>13</sub> heteroaryl, C<sub>7</sub>-C<sub>24</sub> alkaryl, C<sub>4</sub>-C<sub>23</sub> alkheteroaryl, up to per-halosubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, up to per-halosubstituted C<sub>2</sub>-C<sub>10</sub>-alkenyl, up to per-halosubstituted C<sub>3</sub>-C<sub>10</sub> cycloalkyl, up to per-halosubstituted C<sub>6</sub>-C<sub>14</sub> aryl and up to per-halosubstituted C<sub>3</sub>-C<sub>13</sub> heteroaryl, wherein Y is -O-, -S-, -N(R<sup>5</sup>)-,

-(CH<sub>2</sub>)<sub>m</sub>-, -C(O)-, -CH(OH)-, -(CH<sub>2</sub>)<sub>m</sub>O-, -(CH<sub>2</sub>)<sub>m</sub>S-, -(CH<sub>2</sub>)<sub>m</sub>N(R<sup>5</sup>)-, -O(CH<sub>2</sub>)<sub>m</sub>-,  
-CHX<sup>a</sup>-, -CX<sup>a</sup><sub>2</sub>-, -S-(CH<sub>2</sub>)<sub>m</sub>- and -N(R<sup>5</sup>)(CH<sub>2</sub>)<sub>m</sub>-,

m = 1-3, and X<sup>a</sup> is halogen; and

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Ar is a 5- or 6-member aromatic structure containing 0-2 members of the group consisting of nitrogen, oxygen and sulfur which is unsubstituted or substituted by halogen up to per-halosubstitution and optionally substituted by Z<sub>n1</sub>, wherein n1 is 0 to 3 and each Z is

independently selected from the group consisting of -CN, -C(O)R<sup>5</sup>,

-CO<sub>2</sub>R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>5</sup>, -C(O)NR<sup>5</sup>, -NO<sub>2</sub>, -OR<sup>5</sup>, -SR<sup>5</sup>, -NR<sup>5</sup>R<sup>5</sup>, -NR<sup>5</sup>C(O)OR<sup>5</sup>,

-NR<sup>5</sup>C(O)R<sup>5</sup>, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>6</sub>-C<sub>14</sub> aryl, C<sub>3</sub>-C<sub>13</sub> heteroaryl, C<sub>7</sub>-C<sub>24</sub> alkaryl, C<sub>4</sub>-C<sub>23</sub> alkheteroaryl, substituted C<sub>1</sub>-C<sub>10</sub> alkyl, substituted C<sub>3</sub>-C<sub>10</sub> cycloalkyl, substituted C<sub>7</sub>-C<sub>24</sub> alkaryl and substituted C<sub>4</sub>-C<sub>23</sub> alkheteroaryl;

wherein if Z is a substituted group, it is substituted by the one or more substituents independently selected from the group consisting of -CN, -CO<sub>2</sub>R<sup>5</sup>,

-C(O)NR<sup>5</sup>R<sup>5</sup>, -OR<sup>5</sup>, -SR<sup>5</sup>, -NO<sub>2</sub>, -NR<sup>5</sup>R<sup>5</sup>, -NR<sup>5</sup>C(O)R<sup>5</sup> and -NR<sup>5</sup>C(O)OR<sup>5</sup>, and

wherein R<sup>2</sup> is C<sub>6</sub>-C<sub>14</sub> aryl, C<sub>3</sub>-C<sub>14</sub> heteroaryl, substituted C<sub>6</sub>-C<sub>14</sub> aryl or substituted C<sub>3</sub>-C<sub>14</sub> heteroaryl,

wherein if R<sup>2</sup> is a substituted group, it is substituted by one or more substituents independently selected from the group consisting of halogen, up to per-halosubstitution, and V<sub>n</sub>,

wherein n = 0-3 and each V is independently selected from the group consisting of -CN, -

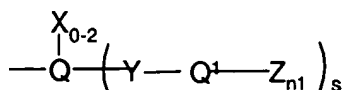
CO<sub>2</sub>R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>5</sup>, -OR<sup>5</sup>, -SR<sup>5</sup>, -NR<sup>5</sup>R<sup>5</sup>, -OC(O)NR<sup>5</sup>R<sup>5</sup>,

-NR<sup>5</sup>C(O)OR<sup>5</sup>, -NR<sup>5</sup>C(O)OR<sup>5</sup>, -SO<sub>2</sub>R<sup>5</sup>, -SOR<sup>5</sup>, -NR<sup>5</sup>C(O)R<sup>5</sup>, -NO<sub>2</sub>, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>6</sub>-C<sub>14</sub> aryl, C<sub>3</sub>-C<sub>13</sub> heteroaryl, C<sub>7</sub>-C<sub>24</sub> alkaryl, C<sub>4</sub>-C<sub>24</sub> alkheteroaryl, substituted C<sub>1</sub>-C<sub>10</sub> alkyl, substituted C<sub>3</sub>-C<sub>10</sub> cycloalkyl, substituted C<sub>6</sub>-C<sub>14</sub> aryl, substituted C<sub>3</sub>-C<sub>13</sub> heteroaryl, substituted C<sub>7</sub>-C<sub>24</sub> alkaryl and substituted C<sub>4</sub>-C<sub>24</sub> alkheteroaryl,

where V is a substituted group, it is substituted by one or more substituents independently

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selected from the group consisting of halogen, up to per-halosubstitution, -CN, -CO<sub>2</sub>R<sup>5</sup>, -C(O)R<sup>6</sup>, -C(O)NR<sup>5</sup>R<sup>5</sup>, -NR<sup>5</sup>R<sup>5</sup>, -OR<sup>5</sup>, -SR<sup>5</sup>, -NR<sup>5</sup>C(O)R<sup>5</sup>, -NR<sup>5</sup>C(O)OR<sup>5</sup> and -NO<sub>2</sub>,  
wherein R<sup>5</sup> and R<sup>5</sup> are each independently as defined above.

18. (Amended) A method of claim 15, wherein B is



wherein

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Y is selected from the group consisting of -O-, -S-, -CH<sub>2</sub>-, -SCH<sub>2</sub>-, -CH<sub>2</sub>S-, -CH(OH)-, -C(O)-, -CX<sup>a</sup><sub>2</sub>, -CX<sup>a</sup>H-, -CH<sub>2</sub>O- and -OCH<sub>2</sub>-,

X<sup>a</sup> is halogen,

Q is a six member aromatic structure containing 0-2 nitrogen, unsubstituted or substituted by halogen, up to per-halosubstitution;

Q<sup>1</sup> is a mono- or bicyclic aromatic structure of 5-10 members with 3 to 10 carbon atoms and 0-2 members of the group consisting of N, O and S, unsubstituted or substituted by halogen up to per-halosubstitution,

X, Z, and n1 are as defined in claim 15, and s = 0 or 1.

19. (Amended) A method as in claim 18, wherein

Q is phenyl or pyridinyl, unsubstituted or substituted by halogen, up to per-halosubstitution,

Q<sup>1</sup> is selected from the group consisting of phenyl, pyridinyl, naphthyl, pyrimidinyl, quinoline, isoquinoline, imidazole and benzothiazolyl, substituted or unsubstituted by halogen, up to per-halo substitution, and

Z and X are independently selected from the group consisting of -R<sup>6</sup>, -OR<sup>6</sup> and -NHR<sup>7</sup>, wherein R<sup>6</sup> is hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl or C<sub>3</sub>-C<sub>10</sub>-cycloalkyl and R<sup>7</sup> is selected from the group consisting of hydrogen, C<sub>3</sub>-C<sub>10</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl and C<sub>6</sub>-C<sub>10</sub>-aryl, wherein R<sup>6</sup> and R<sup>7</sup> can be

substituted by halogen or up to per-halosubstitution.

23. (Amended) A method as in claim 15, comprising administering an amount of compound of formula I effective to inhibit raf kinase.